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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/628,480	07/29/2003	Masao Kano	2018-758	4677

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NIXON & VANDERHYE, PC  
1100 N GLEBE ROAD  
8TH FLOOR  
ARLINGTON, VA 22201-4714

EXAMINER

TRIEU, THERESA

ART UNIT	PAPER NUMBER
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3748

DATE MAILED: 08/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/628,480	Applicant(s) KANO ET AL.	
	Examiner Theresa Trieu	Art Unit 3748	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12 and 13 is/are allowed.
- 6) ☒ Claim(s) 1,5,6,9 and 10 is/are rejected.
- 7) ☒ Claim(s) 2-4,7,8,11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>July 29, 2003</u> . | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Priority*

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

***Claims 1, 9 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by any one of Bellmer (Patent Number 3,565,550) or Noah (Patent Number 5,380,178).***

Regarding claim 1, Bellmer (as shown in Figs. 1 and 4) or Noah (as shown in Figs. 1-5) discloses a vane pump comprising a housing that includes: a rotor chamber (15 in Bellmer; not numbered; however, clearly seen in Fig. 1 in Noah); a rotor (16 in Bellmer; 30 in Noah) that is rotatable received in the rotor chamber and has a plurality of vane grooves (22 in Bellmer; 40 in Noah); a plurality of vanes (23 in Bellmer; 42 in Noah), each of which is radially reciprocally received in a corresponding one of the vane grooves of the rotor; an inlet (26 in Bellmer; 102, 104 in Noah) is communicated with each corresponding pump chamber to supply working fluid into the pump chamber; at least one outlet (30 in Bellmer; 87, 88, 112, 113 in Noah) that communicates between inside and outside of the rotor chamber; a discharge groove (35 in Bellmer; 109, 111 in Noah) includes a first end and second end (no numbered; however, clearly

seen in Fig. 4 in Bellmer and Figs. 3-5 in Noah); wherein the second end of the discharge groove is positioned away from the first end of the discharge groove in the rotational direction of the rotor; and the at least one outlet (30 in Bellmer; 87, 88, 112, 113 in Noah) extends directly from the second end of the discharge groove.

Regarding claims 9 and 10, Bellmer or Noah discloses a housing includes a ring (10 in Bellmer; not numbered; however, clearly seen in Fig. 1 in Noah); and first and second plates (11, 12 in Bellmer; 100 in Noah), which are engaged with first and second axial ends, respectively, of the ring; the inlet, the outlet and the discharge groove being provided in the second plate.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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**2. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bellmer '550 in view of legal precedent.**

Regarding claims 5 and 6, Bellmer discloses the first and second ends of discharge groove; however, Bellmer fails to disclose the vane pump is constructed so that the second end of discharge groove is placed below the first end of the discharge groove in a vertical direction.

However, where a product by process claim is rejected over a prior art product that appears to be identical, although produced by a different process, the burden is upon the applicants to come forward with evidence establishing an obvious difference between the two.

*See In re Marosi*, 218 USPQ 289 (Fed.Cir. 1983).

**3. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bellmer '550 in view of legal precedent.**

Regarding claims 5 and 6, Bellmer discloses the first and second ends of discharge groove; however, Bellmer fails to disclose the vane pump is constructed so that the second end of discharge groove is placed below the first end of the discharge groove in a vertical direction.

Regarding claims 5 and 6, a claim for an article capable of such definition must define the article by its structure and not by the process of making it. Since the claimed the first and second ends of the discharge groove is capable of structural definition, the patentability of the claims must be determined solely on the basis of recited structure, exclusive of process recitations. *In re Johnson*, 394 f.2D 591, 157 USPQ 620, 55 CCPA 1463.

***Allowable Subject Matter***

4. Claims 2-4, 7, 8 and 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. Claims 12 and 13 are allowed.

***Prior Art***

The IDS (PTO-1449) filed on July 29, 2003 has been considered. An initialized copy is attached hereto.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure and consists of four patents.

Kendrick (Patent Number 2,387,761) discloses a fluid pressure device.

Rosean (Patent Number 3,194,168) discloses a fluid pumps.

Sudo et al. (Publication Number JP 57-000390) disclose a vane pump.

Sato (Publication Number JP02-108881) discloses a vane pump.

***Communication***

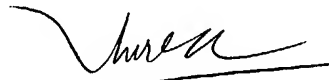
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Theresa Trieu whose telephone number is 703-308-6434. The examiner can normally be reached on Monday-Friday 8:30am- 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E Denion can be reached on 703-308-2623. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TT



Theresa Trieu  
Patent Examiner  
Art Unit 3748